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December 15, 2005

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Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Art Unit 1631 Mail Stop Amendment

Re:

U.S. Utility Patent Application

Application No. 10/813,553; Filed: March 31, 2004

For: Method for Fragment Preparation

Inventors:

LUDINGTON et al.

Our Ref:

1866.0500000/PEG/CMB

1. 4 6

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Information Disclosure Statement Filing Under 37 C.F.R. §1.97(b);
- 2. Form PTO/SB/08A (1 sheet) listing 21 cited documents (US1-US16 and FP1-FP5);
- 3. Form PTO/SB/08B (7 sheets) listing 67 cited documents (NPL1-NPL67);
- 4. A copy of 69 cited documents (FP1-FP5 and NPL1-NPL64); and
- 5. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Sterne, Kessler, Goldstein & Fox PLLC. : 1100 New York Avenue, NW : Washington, DC 20005 : 202.371.2600 f 202.371.2540 : www.skqf.com

Commissioner for Patents December 15, 2005 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Cynthia M. Bouchez Attorney for Applicants Registration No. 47,438

PEG/CMB:kim Enclosures 475115_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ludington et al.

Appl. No.: 10/813,553

Filed: March 31, 2004

For: Method for Fragment Preparation

Confirmation No.: 4109

Art Unit: 1631

Examiner: Smith, Carolyn L.

Atty. Docket: 1866.0500000/PEG/CMB

Information Disclosure Statement Filing Under 37 C.F.R. § 1.97(b)

Mail Stop Amendment

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO/SB/08A and Form PTO/SB/08B are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. Copies of documents **FP1-FP5** and **NPL1-NPL64** are submitted herewith. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications, documents **US1-US16**, cited on the attached Form PTO/SB/08A are not submitted.

In addition, copies of documents NPL65-NPL67 are not provided in accordance with the U.S. Patent and Trademark Office OG notice of October 19, 2004, which states: "the requirement in 37 C.F.R. § 1.98(a)(2)(iii) for a legible copy of the specification, including the claims, and drawings of each cited pending U.S. patent application (or portion of the application which caused it to be listed) is sua sponte waived where the cited pending application is stored in the USPTO's IFW system."

The Examiner's attention is directed to the following U.S. Patent Applications, which are directed to related technical subject matter:

Co-pending U.S. Patent Application No. 09/722,731, inventor Guarnieri, F., filed November 28, 2000 not yet published, cited herein as document **NPL65**;

Co-pending U.S. Patent Application No. 10/791,681, inventor Hollinger, F., filed March 3, 2004, not yet published, cited herein as document **NPL66**;

Co-pending U.S. Patent Application No. 11/146,417, inventors Guarnieri, F., et al., filed June 7, 2005, not yet published, cited herein as document **NPL67**;

Co-pending U.S. Patent Application No. 10/794,181, inventors Brunner, S., et al., filed March 8, 2004, now published as 2004/0267456 A1, cited herein as document US15; and

Co-pending U.S. Patent Application No. 10/920,234, inventors Brunner, S., et al., filed August 18, 2004, now published as 2005/0123995 A1, cited herein as document US16.

In accordance with the recent Federal Circuit decision in *Dayco Prods., Inc. v.*Total Containment, Inc. 329 F.3d 1358 (Fed. Cir. 2003), Applicants submit herewith

Office Actions, which are also directed to related technical subject matter:

Office Action for related U.S. Patent Application No. 09/183,267, inventor Guarnieri, F., filed October 30, 1998, mailed June 30, 2000, cited herein as document NPL57;

Office Action for related U.S. Patent Application No. 09/183,267, inventor Guarnieri, F., filed October 30, 1998, mailed March 5, 2001, cited herein as document NPL58;

Office Action for related U.S. Patent Application No. 09/183,267, inventor Guarnieri, F., filed October 30, 1998, mailed March 12, 2003, cited herein as document NPL59;

Office Action for related U.S. Patent Application No. 09/722,731, inventor Guarnieri, F., filed November 28, 2000, mailed September 26, 2002, cited herein as document NPL60; and

Office Action for related U.S. Patent Application No. 09/722,731, inventor Guarnieri, F., filed November 28, 2000, mailed August 30, 2005, cited herein as document NPL61.

The identification of these U.S. Patent Applications and Office Actions is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached Form PTO/SB/08A and Form PTO/SB/08B based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return copies of the enclosed Form PTO/SB/08A and Form PTO/SB/08B, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Cynthia M. Bouchez Attorney for Applicants

Registration No. 47,438

Date: 16. 15, 2004

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Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

Complete if Known			
Application Number	10/813,553		
Filing Date	March 31, 2004		
First Named Inventor	Ludington, J.		
Art Unit	1631		
Examiner Name	Smith, Carolyn L.		
Attorney Docket Number	1866.0500000/PEG/CMB		

			U.S. PATENT DOCUMEN	NTS
Examiner	Cite	Document Number	Publication Date	Name of Patentee or
Initials	No.1	Number-Kind Code ^{2 (If Known)}	MM-DD-YYYY	Applicant of Cited Document
	USI	5,557,535	09/17/1996	Srinivasan et al.
	US2	5,600,571	02/04/1997	Friesner et al.
	US3	5,854,992	12/29/1998	Shakhnovich et al.
	US4	5,884,230	03/16/1999	Srinivasan et al.
·	US5	6,029,114	02/22/2000	Shamovsky et al.
	US6	6,178,384 B1	01/23/2001	Kolossvåry
	US7	6,251,620 B1	06/26/2001	Hatada et al.
	US8	6,341,256 B1	01/22/2002	Deem et al.
	US9	6,426,205 B1	07/30/2002	Tyers and Willems
	US10	6,489,608 B1	12/03/2002	Silling
	US11	6,640,191 B1	10/28/2003	Deem et al.
	US12	6,716,614 B1	04/06/2004	Donoho et al.
	US13	6,735,530 B1	05/11/2004	Guarnieri
	US14	2003/0055574 A1	03/20/2003	Still et al.
	US15	2004/0267456 A1	12/30/2004	Brunner et al.
	US16	2005/0123995 A1	06/09/2005	Brunner et al.

		FOREIGN PATENT DOCUM	MENTS
Cite	Foreign Patent Document	Publication Date	Name of Patentee or
No.'	Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document
ED1	NAC 00/04047 A4	40/04/4000	Mount Sinai School of Medicine of the
FPI	WO 96/34347 A1	10/31/1996	City University of New York and Guarnieri
FP2	WO 97/16177 A1`	05/09/1997	SmithKline Beecham Corporation and Abdel-Meguid <i>et al.</i>
FP3	EP 0 807 687 A2	11/19/1997	SmithKline Beecham Corporation and Abdel-Meguid et al.
FP4	WO 04/081841 A1	09/23/2004	Sarnoff Corporation and Guanieri
FP5	WO 04/078932 A1	09/16/2004	Locus Pharmaceuticals, Inc. and Hollinger
	FP1 FP2 FP3 FP4	No. Country Code* Number* Kind Code* (if known) FP1 WO 96/34347 A1 FP2 WO 97/16177 A1* FP3 EP 0 807 687 A2 FP4 WO 04/081841 A1	Cite No. I Foreign Patent Document Country Code* Number* Kind Code* (if known) Publication Date MM-DD-YYYY FP1 WO 96/34347 A1 10/31/1996 FP2 WO 97/16177 A1* 05/09/1997 FP3 EP 0 807 687 A2 11/19/1997 FP4 WO 04/081841 A1 09/23/2004

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Signature	·	Considered	

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English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO				Con	mplete if Known
		Application Number	10/813,553		
INFORMATION DISCLOSURE			CLOSURE	Filing Date	March 31, 2004
STATEME	STATEMENT BY APPLICANT		First Named Inventor	Ludington, J.	
(Use as many sheets as necessary)			s necessary)	Art Unit	1631
				Examiner Name	Smith, Carolyn L.
Sheet	1	of	7	Attorney Docket Number	1866.0500000/PEG/CMB

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	NPL1	Adachi, M., et al., "A novel methodology for assisting in the discovery of new chromogens: theoretical calculations with high throughput screening," Advances in Colour Science and Technology 4:124-129, University of Leeds (2001)	
	NPL2	Adams, D.J., "Grand canonical ensemble Monte Carlo for a Lennard-Jones fluid," <i>Mol. Phys.</i> 29:307-311, Taylor & Francis Ltd. (1975)	
	NPL3	Apostolakis, J., et al., "Computational Ligand Design," Combinatorial Chemistry and High Throughput Screening 2:91-104, Bentham Science Publishers B.V. (1999)	
	NPL4	Basson, I. and Reynhardt, E.C., "NMR of montan wax," J. Phys. D: Appl. Phys. 21:1434-1437, IOP Publishing Ltd. (1998)	
	NPL5	Basson, I. and Reynhardt, E.C., "An investigation of the structures and molecular dynamics of natural waxes: III. Montan wax," <i>J. Phys. D: Appl. Phys.</i> 21:1434-1437, IOP Publishing Ltd. (1988)	
	NPL6	Blaskó, A., et al., "Pendant-Capped Porphyrins.2.Structural Analysis and Dynamics of the Biphenyl Pendant-Capped Porphyrin Model of Catalase and Its Fe (III) Complex by One- and Two-Dimensional 1H NMR Spectroscopy and Distance Geometry/Molecular Modeling Refinement," J. Am. Chem. 58:5738-5747, American Chemical Society (1993)	
	NPL7	Brandmeier, V., <i>et al.</i> , "8. Antiparallel β-Sheet Conformation in Cyclopeptides Containing a Pseudo-amino Acid with Biphenyl Moiety," <i>Helv. Chim. Acta</i> 77:70-85, Neu Schweizerische Chemische Gesellschaft (1994)	
	NPL8	Bredikhin, A., et al., "Molecular and Crystalline Structure of Dimethyl 4,6- Dimethyl-2-(2-nitrophenyl)-1,2-dihydropyridine-3,5-dicarboxylate, By-product in the Synthesis of Nifedipine," Russian Journal of Organic Chemistry 35:1372- 1376, Маик "Hayka/Interperiodica" (1999)	
	NPL9	Caflisch, A., et al., "Multiple Copy Simultaneous Search and Construction of Ligands in Binding Sites: Application to Inhibitors of HIV-1 Aspartic Proteinase," J. Med. Chem. 36:2142-2167, American Chemical Society (1993)	
	NPL10	Calafat, A.M., et al., " A New Arrangement for the Anticancer Antibiotics Tallysomyein and Bleomycin When Bound to Zinc: An Assessment of Metal and Ligand Chirality by NMR and Molecular Dynamics," J. Am. Chem. Soc. 119:3656-3664, American Chemical Society (1997)	

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Examiner		Date		
Signature		Considered		

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INFORMATION DISCLOSURE			CLOSURE	Filing Date	March 31, 2004	
STATEMENT BY APPLICANT		First Named Inventor	Ludington, J.			
	(Use as many			Art Unit	1631	
				Examiner Name	Smith, Carolyn L.	
Sheet	2	of	7	Attorney Docket Number	1866.0500000/PEG/CMB	

		NON PATENT LITERATURE DOCUMENTS	,
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	NPL11	Catlow, C., et al., "Computer Modeling of Nucleation, Growth, and Templating in Hydrothermal Synthesis," Chem. Mater. 10:3249-3265, American Chemical Society (1998)	
	NPL12	Clough, S.B., et al., "Molecular Dynamics Simulation of Substituted Conjugated Ionic Polyacetylenes," <i>Macromolecules</i> 26:597-600, American Chemical Society (1993)	
	NPL13	Chan, D.C., et al., "Core Structure of gp41 from the HIV Envelope Glycoprotein," Cell 89:263-273, Cell Press (1997)	
	NPL14	Chen, B., et al., "Synthesis of Specifically Deuterated Nucleotides and Their Application in Mechanistic Elucidation of DNA and RNA Cleavage by the Hydroxyl Radical," Abstract No. 116, Book of Abstracts, American Chemical Society, 224th ACS National Meeting, Boston, MA (2002)	
	NPL15	Dennis, S., et al., "Computational mapping identifies the binding sites of organic solvents on proteins," <i>Proc. Natl. Acad. Sci. USA</i> 99:4290-4295, National Academy of Sciences (2002)	i
	NPL16	Ding, X., et al., "Nature of the Inactivation of Elastase by N-Peptidyl O aroyl hydroxylamine as a Function of pH," <i>Biochem. 34</i> :7749-7756, American Chemical Society (1995)	
	NPL17	Duggan, H. and Craik, D.J., " ¹ H and ¹³ C NMR Relaxation Studies of Molecular Dynamics of the Thyroid Hormones Thyroxine, 3, 5, 3'-Triiodothyronine, and 3,5,-Diiodothyronine," <i>J. Med. Chem.</i> 39:4007-4016, American Chemical Society (1996)	
	NPL18	Edwards and Burnstein, "Synthetic Inhibitors of Elastase," <i>Med. Res. Rev.</i> 14:127-194, John Wiley & Sons, Inc. (1994)	
	NPL19	Gibson, K.D. and Scheraga, H.A., "Crystal Packing without Symmetry Constraints.2. Possile Crystal Packings of Benzene Obtained by Energy Minimization from Multiple Starts," <i>J. Phys. Chem.</i> 99:3765-3773, American Chemical Society (1995)	
	NPL20	Guarnieri, F., and Mezei, M., "Simulated Annealing of Chemical Potential: A General Procedure for Locating Bound Waters. Application to the Study of the Differential Hydration Propensities of the Major and Minor Grooves of DNA," J. Am. Chem. Soc. 118:8493-8494, American Chemical Society (1996)	

Examiner	Date	
Signature	Considered	

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(Art Unit	1631	
				Examiner Name	Smith, Carolyn L.
Sheet	3	of	7	Attorney Docket Number	1866.0500000/PEG/CMB

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	Γ2
	NPL21	Henson, N., et al., "Computational Studies of Cobalt-Substituted Aluminophosphates," J. Phys. Chem. A 104:2423-2431, American Chemical Society (2000)	
	NPL22	Honma, T., "Recent Advances in De Novo Design Strategy for Practical Lead Identification," Med. Res. Rev. 23:606-632, Wiley Periodicals, Inc. (September 2003)	
	NPL23	Huang, C.C., et al., "Integrated Tools for Structural and Sequence Alignment and Analysis," Pacific Symposium on Biocomputing, presented at the Pacific Symposium on Biocomputing, Oahu, Hawaii, pp.230-241 (2000)	
	NPL24	Johnson, P.M., "Resonance ionization spectra as a reflection of excited state dynamics," <i>Inst. Phys. Conf. Ser. No 114: Section 4</i> :145-150, presented at the <i>Proceedings of the Fifth International Symposium on Resonance Ionization Spectroscopy and its Applications</i> , Congress Centre Villa Ponti, Varese, Italy (1990)	
	NPL25	Joseph-McCarthy, D., et al., "Use of MCSS to Design Small Targeted Libraries: Application to Picornavirus Ligands," J. Am. Chem. Soc. 123:12758-12769, American Chemical Society (2001)	
	NPL26	Koone, N., et al., "Diffusion of Simple Liquids in Porous Sol-Gel Glass," J. Phys. Chem. 99:16976-16981, American Chemical Society (1995)	
	NPL27	Kortemme, T., and Baker, D., "A simple physical model for binding energy hot spots in protein-protein complexes," <i>Proc. Natl. Acad. Sci. USA</i> 99:14116-14121, National Academy of Sciences (2002)	
	NPL28	Lee, T. and Jones, J.B., "Probing the Abilities of Synthetically Useful Serine Proteases to Discriminate between the Configurations of Remote Stereocenters Using Chiral Aldehyde Inhibitors," <i>J. Am. Chem. Soc. 118</i> :502-508, American Chemical Society (1996)	
	NPL29	Lee, YC., et al., "Computational Studies of the Silicon Substitution Effects in Polyelectrolytes Containing Zeolitic Fragments," Polymeric Materials Science and Engineering 80:620-621, American Chemical Society (1999)	
	NPL30	Lee, YC., et al., "Computational Studies of Polyelectrolytes Containing Zeolitic Fragments," J. Phys. Chem. B 103:6445-6449, American Chemical Society (1999)	
Examiner Signature		Date Considered	司

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PTO/SB/08B (08-03)

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Substitute for	form 1449/PT	O O		Complete if Known		
				Application Number	10/813,553	
INFORM	MATION	DISC	CLOSURE	Filing Date	March 31, 2004	
STATEMENT BY APPLICANT				First Named Inventor	Ludington, J.	
	(Use as many	sheets a	s necessary)	Art Unit	1631	
				Examiner Name	Smith, Carolyn L.	
Sheet	4	of	7	Attorney Docket Number	1866.0500000/PEG/CMB	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	NPL31	Lynch, G.C. and Pettit, B.M., "Grand canonical ensemble molecular dynamics simulations: Reformulation of extended system dynamics approaches," <i>J. Chem. Phys.</i> 107:8594-8610, American Chemical Society (1997)	
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Substitute for	form 1449/P7	О		Complete if Known		
				Application Number	10/813,553	
INFORMATION DISCLOSURE				Filing Date	March 31, 2004	
STATEMENT BY APPLICANT (Use as many sheets as necessary)			PLICANT	First Named Inventor	Ludington, J.	
				Art Unit	1631	
				Examiner Name	Smith, Carolyn L.	
Sheet	5	of	7	Attorney Docket Number	1866.0500000/PEG/CMB	

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	NPL42	Miranker, A., and Karplus, M., "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method," <i>Proteins 11</i> :29-34, Wiley-Liss, Inc. (1991)	
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	NPL58	Copy of Office Action for U.S. Patent Application No. 09/183,267, inventor Guarnieri, filed October 30, 1998, mailed on March 5, 2001	
	NPL59	Copy of Office Action for U.S. Patent Application No. 09/183,267, inventor Guarnieri, filed October 30, 1998, mailed on March 12, 2003	
	NPL60	Copy of Office Action for U.S. Patent Application No. 09/722,731, inventor Guarnieri, filed November 28, 2000, mailed on September 26, 2002	

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(Use as many s	sheets d	is necessary)	Art Unit	1631
				Examiner Name	Smith, Carolyn L.
Sheet	7	of	7	Attorney Docket Number	1866.0500000/PEG/CMB

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NPL67 Co-pending U.S. Application No. 11/146,417, inventors Guarnieri, F., et al., filed June 7, 2005 (NOT PUBLISHED)	

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